

REMARKS

The following is intended as a full and complete response to the Final Office Action, dated December 8, 2008, and the Advisory Action, dated March 24, 2009. In the Final Office Action, the Examiner rejected claims 7-9 and 11-13 under 35 U.S.C. §103(a) as being unpatentable over Lutterschmidt (U.S. 6,356,947) in view of Borcharding (U.S. 5,303,369). Applicant traverses these rejections.

Claim 7 recites the limitations of: (1) parsing the script to determine resources required by each of the plurality of other processors based on a map of execution sequences that includes an execution sequence for each of the plurality of other processors; (2) allocating resources based on the map of execution sequences included in the script; and (3) each of the plurality of other processors being configured to be able to determine what tasks can be performed without having to wait to receive information from a different one of the plurality of other processors. The cited references fail to teach or suggest each of these limitations.

Rejections under §103(a)

First, the cited references fail to teach or suggest the limitations of parsing the script to determine resources required by each of the plurality of other processors based on the map of execution sequences, as recited in claim 7. The Examiner admits, at pages 3-4 of the Final Office Action, that the Lutterschmidt reference fails to teach or suggest these limitations. Instead, the Examiner relies on the Borcharding reference as disclosing these specific limitations.

In the Advisory Action, the Examiner responded to the arguments made by the Applicant in the Response to Final Office Action, stating that Borcharding teaches a script interpreter that interprets the script and the result is a set of byte codes that specify tasks that "host processor 12 [requires] signal processor 16 to perform" (Advisory Action at page 2). As clearly taught in Borcharding and stated by the Examiner, the script disclosed in Borcharding includes information related to how many resources should be allocated to a single signal processor, namely the signal processor 16, to complete processing of a single task. Accordingly, in the system of Borcharding, a separate script is generated and parsed for each task to be processed. Thus, Borcharding fails to teach or suggest that the script includes an execution sequence of

tasks for each of the plurality of other processors, as expressly recited in claim 11.

Second, the cited references fail to teach or suggest the limitations of allocating resources based on the map of execution sequences included in the script, as recited in claim 7. The Examiner relies on Lutterschmidt as disclosing these limitations.

Lutterschmidt discloses a data delivery system where a monitoring unit receives status updates from data server nodes, where the status updates relate to capacity utilization of the data server nodes. An assignment unit then assigns a client node to a particular data server node based on the status updates received from the data server nodes. See Lutterschmidt at claim 10. Thus, in the system of Lutterschmidt, assigning a data server node to a client node is based on information received from the data server node that represents the utilization of the data server node, i.e., the data server nodes are already executing. In contrast, the claimed approach requires that allocating resources is based on the map of execution resources, which is provided to the dedicated processor in the script prior to beginning execution. Accordingly, the system of Lutterschmidt discloses assigning client nodes to data server nodes based on capacity utilization status updates received from the data server nodes, and therefore fails to teach or suggest the limitations of allocating resources based on the map of execution sequences included in the script, as recited in claim 7.

Borcherding fails to cure the deficiencies of Lutterschmidt with respect to these limitations.

Lastly, the cited references fail to teach or suggest the limitations of each of the plurality of other processors being configured to be able to determine what tasks can be performed without having to wait to receive information from a different one of the plurality of other processors, as recited in claim 7. In the Advisory Action, the Examiner suggested that these limitations are not recited in the pending claims. These amendments explicitly add language to the claims directed towards these features.

As described in paragraph [0010] of the present application, parsing a script that includes an execution sequence of tasks for each of the plurality of other processors, as claimed, provides the non-obvious advantage of the first processor knowing ahead of time which tasks can be performed by each of the other processors without having to wait for another processor to complete processing a particular task. The claimed

approach results in a more efficient processing technique relative to prior art approaches.

In contrast, the system disclosed in Borcharding creates the exact problems that embodiments of the present invention are intended to solve. More specifically, since each script is parsed serially in Borcharding, delays may occur if no processing unit is currently available to process the task. Borcharding explicitly states that “[t]he next step for handling Task A is determined by its processing characteristics and the availability of system resources ... [t]hus, depending on what processor 16, if any, is available and meets the requirements of Task A, the task is directed to it ... [t]hus, queue manager 42 reads Task A's claimed processing characteristics and determines what resources, if any, are available ... [d]epending on availability of resources that meet the requirements of Task A, scheduler 42 assigns Task A to a processor 16 for execution or delays execution” (Borcharding, col. 6, lines 10-20) (emphasis added). According to the teachings of Borcharding, each time that a new task is parsed by the script interpreter 32, the script interpreted must search for available resources to allocate to the task and for a signal processor 16 that is available to process the task. If no resources are available, or if no signal processor 16 is available, then processing the task is delayed.

Based on these passages from Borcharding, the reference clearly fails to teach or suggest the limitations of each of the plurality of other processors being configured to be able to determine what tasks can be performed without having to wait to receive information from a different one of the plurality of other processors, as recite in claim 7.

Lutterschmidt fails to cure the deficiencies of Borcharding with respect to these limitations.

As the foregoing illustrates, each of the cited references fails to teach or suggest each and every limitation of claim 7. Therefore, no combination of the cited references can render claim 7 obvious. For these reasons, Applicant respectfully submits that claim 7 is allowable over the cited references and requests allowance of the claim. Additionally, claims 9 and 11 are amended to recite limitations similar to those of claim 7 and are allowable for at least the same reasons as claim 7. The remaining claims depend from allowable claims 7, 9, and 11 and are therefore also allowable.

CONCLUSION

Based on the foregoing, Applicants believe that they have overcome all of the rejections set forth in the Final Office Action mailed on December 8, 2008, and that the pending claims are in condition for allowance. If the Examiner has any questions, please contact the Applicant's undersigned representative at the number provided below.

Respectfully submitted,



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